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WORKPLACE MIGRATION PATTERNS

of

WESTERN MASSACHUSETTS RESIDENTS

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WORKPLACE MIGRATION PATTERNS

of

WESTERN MASSACHUSETTS RESIDENTS

Prepared For

Western Massachusetts Economic Development Conference

Prepared By

Center for Economic Development
University of Massachusetts
Amherst, Massachusetts 01003

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WORKPLACE MIGRATION PATTERNS OF WESTERN MASSACHUSETTS RESIDENTS

Major Trends

Based on U.S. Population Census data, the workplace migration patterns of western Massachusetts residents showed the following major trends in 1980:

1. Approximately 57% of the western Massachusetts resident workforce is employed in Hampden County. Hampshire and Berkshire Counties each employ about 15%. Franklin County employs 6% and the remainder work beyond the borders of the four county western Massachusetts region (Table 4).

2. Approximately 4% (13,859) of western Massachusetts' working residents travel to Connecticut to work (Table 4). Six and one half percent (12,591) of Hampden County's workforce work in Connecticut (Table 8).

3. Compared with the state average, a greater percentage of western Massachusetts residents work within their home town or city, rather than working beyond its borders (Table 6).

4. Despite the findings of #3, Hampshire and Franklin counties have the third and fourth highest out-of-county workplace rates in the state (Table 1).

5. Berkshire County has the lowest out-of-county workplace rate of all the non-island Massachusetts counties (Table 1).

6. The above trends in 1980 workplace migration were essentially the same in 1970 (Table 2).

Conclusions

Berkshire County

The Census data on place of work demonstrates, in one manner, the degree to which Berkshire County is economically independent (or isolated) from the rest of the western Massachusetts region. The low rates of worker migration in and out of the county are presumably the result of the Berkshire Mountains' effect as a geographic barrier and the historic tendency of a few large firms to employ the majority of the region's industrial workforce.

This independence is also true in regards to Berkshire County's other borders. Though some residents do travel to Vermont, New York and Connecticut to work, the rates are very low (See Table 4 and 8). Despite that the Albany SMSA is relatively close, only 0.2% of Berkshire County residents work in New York State, and 1.2% work in Connecticut.

This general trend extends down to the municipal civil division (MCD) level where Berkshire's out-migration rate falls 10% below the regional level and almost 20% below the state average (Table 7). This suggests greater within-town employment opportunities than the average Massachusetts municipality.

Table 7 indicates that Pittsfield's migration pattern is very localized, while North Adams is more disperse and therefore similar to other cities in the region.

Franklin County

A large percentage of Franklin County's residents go to work each day beyond their municipal and county borders. The percentage of residents who work in other counties is one of the highest in the state (Table 1). Franklin County's location on the Vermont and New Hampshire borders explains why its out-of-state workplace rates are higher than the state average (Table 3). Most of Franklin County's migrating workers go to Hampshire County, but a significant number (when compared to other inter-county rates) go to Hampden County (Table 4). Franklin sends 3,590 workers to Hampshire County and 817 to Hampden County each day.

Franklin County's high rate of migration is also true at the municipal level, where it has the highest rate in the region and a rate slightly higher than the state average (Table 6).

Greenfield has a migration pattern similar to other towns and cities in the region (Table 7).

Hampshire County

At the county level, Hampshire County has one of the highest workplace migration rates in the state. This is expected given its low industrial concentration and its proximity to Hampden County. Also, as would be expected due to its central location compared to the other western Massachusetts counties, it has the lowest out of state migration rate. More Hampshire County residents work in Worcester County than in Franklin County.

Over 9% of Hampshire County's employee base comes from Hampden County each day. In numbers, this results in 4,455 workers traveling daily into Hampshire from Hampden and 13,705 (21% of Hampshire's worker-residents) traveling into Hampden from Hampshire. The rate at which Hampshire residents work outside their municipalities is almost identical to that of Hampden's, lower than Franklin's and higher than Berkshire's. Of Hampshire County's resident workers, 0.8% (520) travel to Connecticut to work.

Hampden County

Hampden County shows a level of independence similar to Berkshire County, but the probable reasons for this are quite different. There are no factors of isolation for Hampden County; instead it has long played a role as the employment and industrial center for the region. Its high level of industrialization creates a very different employment atmosphere than in any of the other western Massachusetts counties.

Between 6 and 7% (11,600 - 13,600) of Hampden's resident-workers have jobs in Connecticut. This is the highest rate for the region and over twice as high as the state average. More Hampden County residents work "out of the state" (Connecticut) than work "out of the county" (other western Massachusetts counties).

The cities of Springfield, Holyoke and Westfield each employ a much larger percent of their residents than does Chicopee. Chicopee sends a quarter of its workforce to Springfield each day, compared to 11% and 12% for Holyoke and Westfield respectively.

The Western Massachusetts - Connecticut Relationship

Connecticut businesses employ 13,859 or 4% of western Massachusetts' resident workers. Of the four western Massachusetts counties, only Franklin County did not report workers traveling to Connecticut. Berkshire and Hampshire counties each send some of their workfore, but the amount is small -- Berkshire - 748 workers or 1.2% of total; Hampshire - 520 or 0.8% of total.

Hampden County has the most significant relationship with Connecticut - 12,591 (6.5%) of the county's residents go to work in Connecticut. Hartford County, Connecticut sends 3,245 (1.3%) of its residents to Massachusetts each day. Of those Hartford County residents, 1,980 or 0.8% work on the Springfield-Chicopee-Holyoke SMSA (Tables 8 and 9).

The Hartford SMSA and Windsor Locks were the primary areas of employment for western Massachusetts commuters -- Hartford city (2,002 workers), remainder of Hartford SMSA (4,125), Windsor Locks (3,164) (Table 8).

The migration patterns between western Massachusetts and Connecticut show an uneven exchange; more western Massachusetts residents travel to Connecticut than vica versa. Presumably more of these jobs are with the large aerospace firms (i.e. Limited Technology, Hartford; Pratt and Whitney, East Hartford, Hamilton Standard, Windsor Locks). The degree to which western Massachusetts and especially Hampden County rely on these often government related jobs is an important factor in the overall western Massachusetts employment picture.

The Western Massachusetts Region

The above workplace patterns show the divided nature of the region -- Berkshire County to the west and Franklin, Hampshire and Hampden to the east. Within that eastern area, workplace migration rates also indicate that there is a skew in employment opportunity ranging from high opportunity in Hampden in the south, to low opportunity in Franklin in the north. The geographic barrier to greater east-west interaction is significant and any long term development plans, aimed at bringing the two areas closer together, must recognize that barrier.

The relatively short distance between northern and southern Massachusetts allows one to look at the whole area as essentially one labor market. There already is a flow of workers from Franklin to Hampden counties and, given great enough wage and opportunity differentials, Hampden County may appear as an increasingly attractive workplace to more Franklin County residents. This is the relationship that exists now between Hampshire and Hampden Counties. The data in Tables 1 and 2 support this argument as they show an increase in Franklin County's out-migration rate from 1970 to 1980.

The connections between western Massachusetts and Hartford County, Connecticut are significant. As each area grows, there will presumably be more interaction between the two areas. Again, due to distance and good highways, the Hartford SMSA is a workplace option for many western Massachusetts residents. Table 8 summarizes the current migration patterns to Hartford County.

One issue that should be examined in the future concerns what type of migration is occurring between areas. In other words, what are the patterns of migration for occupational groups? This is especially relevant for Hampden County and Hartford County. With the rise in white collar office work in Connecticut, is western Massachusetts exchanging labor skills on an equal basis, or are there differences in the skills that flow between the two states? An extension of this would be, given

the character of economic development in the two states, how well does the overall labor force fit that development?

In conclusion, western Massachusetts is a region in which employment opportunity varies from county to county. The extremes in workplace migration patterns represent a factor of economic development that must be considered when forming strategies that will affect the western Massachusetts economy.

Summary of Tables

Tables 1 and 2 show the county level workplace data for all Massachusetts counties in 1980 and 1970. The 1980 out-migration rates (percent of residents who travel beyond their resident county border to go to work) range from a high of 49.2% for Norfolk County to a low of 1.1% for Nantucket County. The mean rate is 21%.

There is a clear division in the rate patterns of the western Massachusetts counties. Berkshire's 5.1% is the lowest for all counties aside from Nantucket and Dukes (1.1% and 2% respectively). Hampden's rate of 11.2% is also significantly low. Contrasted with these are Hampshire's out-migration rate of 29.1% and Franklin's of 28.1%. These high rates rank third and fourth in the state; behind only Norfolk and Plymouth Counties.

The 1970 data shows approximately the same rankings, though the rates themselves changed slightly. Franklin's rate increased 5%, while the other counties' rates each dropped.

Table 3 demonstrates the same trends as Tables 1 and 2 but also adds aggregated state data and the percent of each county's residents who work outside the state. Hampshire County's out-of-state rate of 1.8% is the lowest for the western Massachusetts region and also falls below the state average of 2.6%. Hampden County's rate of 7.2% is almost twice that of Berkshire's 3.7%. Franklin follows Berkshire with 3%. Three of the four western Massachusetts counties have out-of-state rates that are higher than the state rate.

Table 4 is a distribution of the places where western Massachusetts residents work. The information in Table 4 comes from a sample of the place of work data for 35 of the 109 towns and cities in western Massachusetts. Table 4 demonstrates well the degree to which Berkshire County's resident (95.8%) stay within the county's borders. Hampden County follows close behind, with 89.2% of all residents working within

the county. Only 2.3% of Hampden County residents travel north to work in Hampshire County, while 6% travel south to Connecticut.Of all the counties, Hampshire sends the largest percentage of its workforce outside its borders to another county. That is, Hampden County receives 21.1% of Hampshire County's residents on each work day.

Table 5 turns around some of the information in Table 4 and shows where the people who work in a given county come from each day. In other words, how dependent are the western Massachusetts counties on each other for their respective employee bases? (Table 5 looks at western Massachusetts residents only. It does not consider the amount of workers coming from other areas to work in western Massachusetts. Reliable data on this topic was not available.)

Based on the 35% sample of western Massachusetts towns, very few workers travel into Berkshire County from the other counties. Franklin follows Berkshire with 98.2% of its western Massachusetts employees coming from Franklin County. Hampden's rate is 92.8% and Hampshire's is 84.5%. Though Table 4 shows that Hampshire County sends 21.1% of its residents to Hampden County, Table 5 shows that those Hampshire County workers make up only 6.7% of Hampden's total western Massachusetts workforce.

Table 6 presents the county region and state aggregates for the place of work data at the town and city or municipal civil division (MCD) level. Whereas out-migration rates at the county level range from 1.3 to 27.7%, the municipal civil division rates range from 41.1 to 60.3%. Hampden and Hampshire each have out-migration rates of 52%, while Franklin's is 60.3% and Berkshire's is a low 41.1%. These rates yield an overall regional average of 51.1% which falls below the state average of 58.3%.

Table 7 contains MCD level data taken directly from the Census tabulations. This draws the workplace distributions for nine western Massachusetts cities and towns. For most places, about 60 - 70% of the residents work within the MCD. Chicopee is an exception at 39.5%, as is Pittsfield at 86.7%.

The "regional employer city" column gives an indication of what the relationships are between the major cities of the region. Clearly, Springfield plays the dominant employer role.

All places send workers out of the state. Springfield's rate of 6.3% is the highest while Amherst and Pittsfield's rates of 0.2% are the lowest.

Table 8 gives detailed information on where western Massachusetts residents work in Connecticut. No Franklin County residents reported working in Connecticut.

Table 9 gives less specific information than Table 8 on the opposite migration pattern -- Connecticut to western Massachusetts. The categories listed are those given in the census data.

TABLE 1: 1980 PLACE OF WORK FOR RESIDENTS OF MASSACHUSETTS AT COUNTY LEVELS

County of Residence	Worker Residing in County	%[1] Worked in County	%[1] Worked Outside County	Out Migration Ranking
Barnstable	57,760	89.2	10.8	11
Berkshire	62,298	94.9	5.1	12
Bristol	206,952	77.5	22.5	8
Dukes	3,947	98.0	2.0	13
Essex	289,365	74.7	25.3	6
Franklin	29,188	71.9	28.1	4
Hampden	193,703	88.8	11.2	10
Hampshire	64,951	70.9	29.1	3
Middlesex	667,612	72.4	27.6	5
Nantucket	2,613	98.9	1.1	14
Norfolk	291,230	50.8	49.2	1
Plymouth	172,914	57.1	42.9	2
Suffolk	288,363	75.5	24.5	7
Worcester	293,774	85.6	14.4	9

Mean Out Migration Rate = 21.0

Median Out Migration Rate = 23.5

Range = 49.2 - 1.1 = 48.1

Source: 1980 Census PC80-1-C-23 Table 174

[1] Based on number of residents who reported a place of work

TABLE 2: 1970 PLACE OF WORK FOR RESIDENTS OF MASSACHUSETTS AT COUNTY LEVELS

County of Residence	Worker Residing in County	%[1] Worked in County	%[1] Worked Outside County	Out Migration Ranking
Barnstable	34,743	90.2	9.8	11
Berkshire	56,208	94.7	5.3	12
Bristol	180,542	81.1	18.9	8
Dukes	2,276	95.8	4.2	13
Essex	256,380	77.0	23.0	6
Franklin	23,755	76.4	23.6	5
Hampden	181,814	86.7	13.3	[illegible]
Hampshire	47,896	68.2	31.8	
Middlesex	570,950	71.1	28.9	[illegible]
Nantucket	1,614	96.9	3.1	[illegible]
Norfolk	244,346	49.5	50.5	[illegible]
Plymouth	124,497	57.9	42.1	[illegible]
Suffolk	298,154	77.3	22.7	
Worcester	259,073	84.9	15.1	9

Mean Out Migration Rate = 20.6%

Median Out Migration Rate = 20.8%

Range = 50.5 - 3.1 = 47.4

Source: 1970 U.S. Population Census

[1] Based on number of residents who reported a place of work

TABLE 3: WORKERS 16 YEARS AND OLDER BY PLACE OF WORK AT COUNTY LEVEL FOR WESTERN MASSACHUSETTS COUNTIES & STATE AVERAGE

	Berkshire		Franklin	
Worked	Number	%	Number	%
In County of Residence	56,046	94.9	19,833	71.9
Outside County	799	1.3	6,900	25.0
Outside State	2,204	3.7	838	3.0
Total Reports	59,049	100.0	27,571	99.9
Not Reported	3,249	5.2[1]	1,617	5.5[1]

	Hampden		Hampshire	
Worked	Number	%	Number	%
In County of Residence	158,278	88.8	42,984	70.9
Outside County	6,953	3.9	16,502	27.2
Outside State	12,978	7.2	1,108	1.8
Total Reports	178,209	99.9	60,594	99.9
Not Reported	15,494	7.9[1]	4,357	6.7[1]

	State	
Worked	Number	%
In County of Residence	1,776,366	73.6
Outside County	573,375	23.7
Outside State	62,868	2.6
Total Reports	2,412,609	99.9
Not Reported	212,061	8.0[1]

[1] Percent of all resident workers who did not report on place of work

Source: 1980 Census STF3 - Question 32 from State, Berkshire, Franklin, Hampden, Hampshire.

TABLE 4: WHERE WESTERN MASSACHUSETTS RESIDENTS WORK - PLACE OF WORK FOR RESIDENTS OF FOUR WESTERN MASSACHUSETTS COUNTIES[1]

Place of Work in percent of workers/residents who reported place of work[2] and Projected to Number of Worker Residents[3]

Place of Residence	Total WR (Reporting WR)	Berkshire County	Franklin County	Hampden County	Hampshire County	Worcester County	Conn	VT	NY	NH	Work Elsewhere	Not Reported
Berkshire	62,298 (59,049)	95.8% 59,681	0	0.3 187	0	0	0.4 249	0.3 187	0.2 125	0	2.7 1,682	5.2[4] 3,239
Franklin	29,188 (27,571)	0%	73.8 21,541	2.8 817	12.3 3,590	4.3 1,255	0	1.8 525	0	0.1 29	4.8 1,401	5.5 1,605
Hampden	193,703 (178,209)	0%	0	89.2 172,783	2.3 4,455	0	6.0 11,622	0	0	0	2.3 4,455	5.2 10,073
Hampshire	64,951 (60,594)	0%	0.5 325	21.1 13,705	71.0 46,115	1.2 779	0.7 455	0	0	0.01 35	4.6 2,989	6.1 3,962
West. Mass.	350,140 (325,423)	14.4% 50,420	5.9 20,658	56.9 199,230	15.1 52,871	0.6 2,101	3.8 13,305	0.2 700	0.04 140	0.01 35	3.0 10,504	7.2 25,210

Source: STF 4 1980 U.S. Population Census Place of Work at City and Town level and
STF 3 1980 U.S. Census Place of Work at County Level

1 Based on a 35% sample of the 101 cities and towns in western Mass. This sample is made up of 270,916 of the 350,140 (77.4%) western Mass. worker-residents.

2 Based on Worker-Residents who reported their place of work.

3 Projections of actual numbers of Worker-Residents based on Total Worker-Residents living in each county and region.

4 Percentage of Not Reported is based on all Worker-Residents living in each area.

TABLE 5: WORK FORCE INTER-RELATIONSHIPS IN WESTERN MASSACHUSETTS
Percent Distributions of Western Massachusetts Employees by their Place of Residence

	Place of Residence - percent			
Place of Work	Berkshire	Franklin	Hampden	Hampshire
Berkshire Total Employed =	99.9	0.1	0	0
Franklin	0	98.2	0	1.8
Hampden	0.1	0.4	92.8	6.7
Hampshire	0	6.4	9.1	84.5

Source: STF 4 1980 U.S. Population Census. Place of Work at city and town level. Sample of 25% of 101 western Massachusetts cities and towns representing 81% of 350,140 workers who reside in western Massachusetts.

TABLE 6: WORKERS by PLACE of WORK at the MUNICIPAL CIVIL DIVISION LEVEL for WESTERN MASACHUSETTS COUNTIES and COMMONWEALTH of MASSACHUSETTS

Number & % Who Worked	Berkshire County #	Berkshire County %[1]	Franklin County #	Franklin County %[1]	Hampden County #	Hampden County %[1]	Hampshire County #	Hampshire County %[1]
IN MCD of Residence	34,761	58.9	10,959	39.7	84,300	47.3	28,910	47.7
Outside MCD of Residence	24,288	41.1	16,612	60.3	93,909	52.7	31,68[illegible]	52.3
Total Reported	59,049	100.0	27,571	100.0	178,209	100.0	60,594	100.0
Not Reported	3,249	5.2[2]	1,617	5.5[2]	15,494	7.9[2]	4,357	6.7[2]

	State #	State %	Western Mass. #	Western Mass. %
IN MCD of Residence	1,005,758	41.6	158,930	48.8
Outside MCD of Residence	1,406,839	58.3	166,493	51.1
Total Reported	1,512,597	99.9	325,423	99.9
Not Reported	212,073	12.3	24,717	7.0

Source: 1980 U.S. Population Census STF 3 Data Question 35

[1] Based on Total Reported
[2] Based on Total Worker Residents (In MCD & Outside MCD & Not Reported)

TABLE 7: PLACE OF WORK FOR RESIDENTS OF NINE WESTERN MASSACHUSETTS CITIES & TOWNS

Place of Work - by percentage[1]

Place of Residence	Within Place	Other Significant[3] Employer Towns	Within County	Regional Employer City		Within West Mass.	Outside Mass.	Worked Elsewhere	Not Reported[2]
North Adams	65.8	19.7	96.0	Pittsfield 8.8		96.0	2.1	1.3	4.3
Pittsfield	86.7	8.3	96.7	N.Adams 0.2	Spfld 0.3	97.0	0.2	2.1	4.6
Greenfield	68.8	18.6	89.2	N'ton 1.1	Spfld 1.1	95.6	2.0	1.9	4.5
Chicopee	39.5	9.3	89.3	Holyoke 13.7	Spfld 25.3	93.3	3.9	1.7	8.9
Holyoke	62.3	9.5	87.7	Chicopee 6.8	Spfld 11.1	95.1	2.2	1.8	8.0
Springfield	66.1	11.0	90.0	Holyoke 2.0	Chic. 4.8	90.8	6.3	1.7	9.3
Westfield	60.3	16.2	90.3	Spfld. 12.2		92.3	4.2	3.1	4.9
Amherst	74.1	9.2	86.7	N'ton 4.1	Spfld 2.3	94.4	0.2	4.3	5.9
Northampton	61.1	16.0	80.2	Amherst 7.2	Spfld 4.3	92.7	0.6	6.0	6.9

[1] Based on Number of Worker-Residents who reported Place of Work
[2] Based on Total Worker-Residents in City or Town
[3] Other Significant Employer Towns - See Table 8b.
Source: 1980 U.S. Population Census STF 4 Place of Work

TABLE 7b: Other Significant Employer Towns

North Adams	Pittsfield	Greenfield	Chicopee	Holyoke	Springfield
Clarksburg	Adams	Montague	Agawam	Agawam	Agawam
Williamstown	Dalton	Deerfield	W. Springfield	Southwick	Southwick
Adams	Laneborough	Shelbourne	Southwick	W. Springfield	W. Springfield
Dalton	Lee	Erving	Westfield	Westfield	Westfield
	Lenox	Northfield	Northampton	Easthampton	Northampton
	Gt. Barrington		Ludlow	Northampton	Ludlow
					Wilbraham

Westfield	Amherst	Northampton
Chicopee	Chicopee	Holyoke
Holyoke	Holyoke	Agawam
Agawam	Hadley	W. Springfield
Southwick	S. Hadley	Southwick
W. Springfield	Belchertown	Westfield
		Easthampton
		Southampton

TABLE 8: EMPLOYMENT MIGRATION FROM WESTERN MASSACHUSETTS to CONNECTICUT
By Number and Percent of Workers 16 years and older[1]

PLACE OF RESIDENCE	# of Workers	PLACE OF WORK: Hartford City		East Hartford		E. Windsor Enfield S. Windsor		Windsor Locks		Remainder of Hartford SMSA		Conn. Total		Place of Work Not Reported[2]	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
Hampden Co.	193,703	1937	1.0	1356	0.7	194	1.1	3099	1.6	3874	2.0	12591	6.5	15499	8.0
Agawam	12,698	254	2.0	152	1.2	292	2.3	521	4.1	419	3.3	1651	13.0	1170	9.2
Chicopee	25,707	206	0.8	77	0.3	129	0.5	283	1.1	360	1.4	1028	4.0	2288	8.9
E. Longmeadow	5,858	111	1.9	41	0.7	129	2.2	100	1.7	146	2.5	533	9.1	311	5.3
Hampden	2,095	15	0.7	6	0.3	27	1.3	42	2.0	46	2.2	138	6.6	123	5.9
Holyoke	17,157	51	0.3	51	0.3	86	0.5	103	0.6	86	0.5	377	2.2	1387	8.1
Longmeadow	7,169	201	2.8	86	1.2	351	4.9	129	1.8	330	4.6	1097	15.0	724	10.0
Ludlow	9,200	28	0.3	18	0.2	64	0.7	83	0.9	92	1.0	304	3.3	671	7.3
Springfield	61,784	680	1.1	741	1.2	680	1.1	989	1.6	989	1.6	4016	6.5	5765	9.3
Westfield	16,189	81	0.5	49	0.3	81	0.5	275	1.7	194	1.2	680	4.2	801	5.0
W. Springfield	13,369	147	1.1	67	0.5	107	0.8	281	2.1	281	2.1	896	6.7	884	6.6
Wilbraham	5,699	34	0.6	17	0.3	63	1.1	46	0.8	63	1.1	222	3.9	417	7.3

[1] Percentages based on number of workers reporting a place of work.

[2] Based on all resident workers.

Source: 1980 U.S. Census STF 4 P-B34 Place of Work - Hartford County, Connecticut and Franklin, Berkshire, Hampshire and Hampden Counties, Massachusetts.

TABLE 8 continued: EMPLOYMENT MIGRATION FROM WESTERN MASSACHUSETTS to CONNECTICUT

By Number and Percent of Workers 16 years and older[1]

PLACE OF RESIDENCE	# of Workers	PLACE OF WORK: Hartford City		East Hartford		E. Windsor Enfield S. Windsor		Windsor Locks		Remainder of Hartford SMSA		Conn. Total		Place of Work Not Reported[2]	
		#	%	#	%	#	%	#	%	#	%	#	%	#	%
Hampshire Co.	64,951	65	0.1	130	0.2	65	0.1	65	0.1	195	0.3	520	0.9	4357	6.7
Amherst	14,858									45	0.3	45	0.3	890	6.0
Belchertown	3,790	8	0.2	8	0.2			8	0.2	24	0.6	48	1.2	188	5.0
Easthampton	7,605			15	0.2	15	0.2	30	0.4	23	0.3	91	1.2	553	7.3
Northampton	13,557	27	0.2	27	0.2	7	0.05	14	0.1	14	0.1	95	0.7	947	7.0
S. Hadley	8,122	24	0.3	32	0.4	24	0.3	16	0.2	32	0.4	130	1.6	308	3.8

PLACE OF RESIDENCE	# of Workers	Canaan & N.Canaan		Remainder of Hartford SMSA		Conn. Total		Place of Work Not Reported[2]	
		#	%	#	%	#	%	#	%
Berkshire Co.	62,298	561	0.09	56	0.09	748	1.2	3249	5.2
Becket	540			22	4.1	22	4.1	24	4.4
Egremont	623	32	5.2			32	5.2	23	3.7
G. Barrington	3,126	184	5.9			197	6.3	144	4.6
New Marlboro	503	71	14.0			81	16.0	25	5.0
Otis	379			53	1.4	53	1.4	86	6.9
Sandisfield	278	7	2.4	10	3.6	71	26.0	29	10.0
Sheffield	1,234	257	21.0	12	1.0	304	25.0	21	1.7

TABLE 9:

EMPLOYMENT MIGRATION
FROM HARTFORD COUNTY, CT TO WESTERN MASS.

Town of Residence	Total Resident Workers	# Not Reported	# Working in City of Springfield[2]	# Working in Sp.-Chic-Hol SMSA[2]	Total Working in Mass.[2]	% Working in Mass.[1]
Canton	3,950	313	16	28	43	1.0
E. Granby	2,360	130	-	52	52	2.2
E. Hartford	27,690	1,175	12	24	36	0.1
E. Windsor	4,456	261	31	13	45	0.9
Enfield	21,434	3,878	823	1,050	1,886	8.7
Glastonbury	11,909	733	24	-	24	0.1
Granby	4,228	850	38	118	21	3.7
Hartford Town	54,756	4,663	11	39	50	0.0
Manchester	24,996	1,345	29	67	97	0.3
Marlborough	2,454	257	-	20	20	0.8
Newington	15,194	1,078	15	17	32	0.2
Simsbury	10,173	1,020	29	89	118	1.1
S. Windsor	8,839	704	11	31	42	0.4
Saffield	4,578	247	206	305	512	11.1
W. Hartford	29,711	1,981	76	44	120	0.4
Windsor	13,189	1,168	46	38	82	0.6
Windsor Locks	6,356	317	20	45	65	1.0
Hartford County	246,273	20,120	1,387	1,980	3,245	1.3

Source: STF 4 Census Tabulations PB34 - Place of Work
[1] Based on Resident workers who reported a place of work
[2] Projections based on samples of those reporting place of work

APPENDIX

Description of Method

The data source was the 1980 Census of Population at the state, county and municipal civil division level. The majority of that data came from the recently released Summary Tape File (STF) 4, which gives, among other topics, detailed place of work information on a town by town basis.

Variation will be noted between data taken from the STF 3 state and county levels and that taken from the MCD level STF 4. There are two reasons for this, the first being that state and county data was issued during 1982, often before the tabulations were complete. The STF 4 data is the most current and accurate. The second reason for variation is that a 35% sample, representing 77% of all workers was taken from the STF 4 rather than tabulating the data on all 109 western Massachusetts cities and towns.

Overall variation between the two types of data is small and therefore substantiates the resulting conclusions which are made.